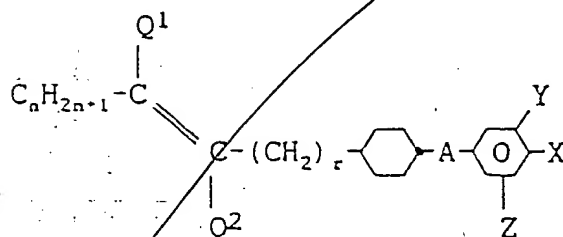


Patent Claims

SUB
B1

1. Phenylcyclohexanes of the formula I



in which n is 0 to 7, Q^1 and Q^2 are H, or one of these radicals is alternatively CH_3 , r is 0, 1, 2, 3, 4 or 5, A is trans-1,4-cyclohexylene, 1,4-phenylene, 3-fluoro-1,4-phenylene or a single bond, X is F, Cl, $-\text{CF}_3$, $-\text{CN}$, $-\text{OCF}_3$ or $-\text{OCH}_2\text{F}$, and Y and Z are each, independently of one another, H or F, with the proviso that, in the case where A is a single bond, $\text{Q}^1 = \text{Q}^2 = \text{H}$ and simultaneously X = CN, Y and/or Z are F.

2. Phenylcyclohexanes according to claim 1, characterized in that X is F, Cl, $-\text{CF}_3$ or $-\text{OCF}_3$.
3. Phenylcyclohexanes according to at least one of claims 1 to 2, characterized in that Y = Z = H.
4. Phenylcyclohexanes according to at least one of claims 1 to 2, characterized in that Y = F and Z = H or F.

SUB
a1

5. Phenylcyclohexanes according to claim 1, characterized in that X = CN, Y = F and Z = H or F.
6. Use of the phenylcyclohexanes of the formula I according to claim 1 as components of liquid-crystalline media for electrooptical displays.

SUB
B2

7. Liquid-crystalline medium for electrooptical displays having at least two liquid-crystalline components, characterized in that at least one component is a phenylcyclohexane of the formula I according to claim 1.

8. Electrooptical display based on a liquid-crystal cell, characterized in that the liquid-crystal cell contains a medium according to claim 7.

ACH
B3

108260-05949660